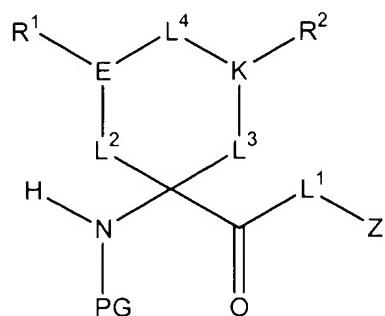


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims:

1. (Amended) The A compound of the following formula

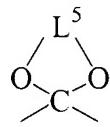


wherein

Z comprises the residue of a solid polymer support having hydroxyl or amino functionality;

L<sup>1</sup> comprises a divalent group of the formula -O-, -NH-, -O-CH<sub>2</sub>-C<sub>6</sub>H<sub>4</sub>-CH<sub>2</sub>O-;

L<sup>2</sup> and L<sup>3</sup> comprise, independently, alkylene, alkenylene, alkynylene, or a direct single bond;



L<sub>4</sub> comprises alkylene, -O-, -S-, -C(O)-, -S(O)-, -S(O)<sub>2</sub>-, or a direct single or double bond;

L<sup>5</sup> comprises -CH<sub>2</sub>CH<sub>2</sub>- or -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-;

E and K comprise, independently, -N-, -CH-, or -C=;

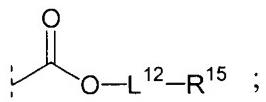
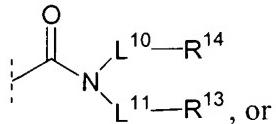
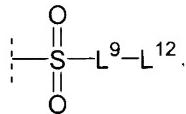
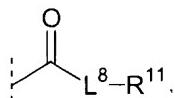
PG comprises hydrogen or an amino protecting group;

R<sup>1</sup> and R<sup>2</sup> comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, hydrogen, halo, -O-G<sup>3</sup>, -O-G<sup>4</sup>, -G<sup>3</sup>, -G<sup>4</sup>, or -N(G<sup>3</sup>)G<sup>4</sup>;

R<sup>1</sup> and R<sup>2</sup> may be taken together to constitute a cycloalkyl or heterocyclyl ring, or, where L<sup>4</sup> is a direct bond, R<sup>1</sup> and R<sup>2</sup> may be taken together to constitute a fused aryl or heteroaryl ring;

G<sup>3</sup> and G<sup>4</sup> comprise, independently,

$\begin{array}{c} | \\ \text{---} \end{array} \text{L}^7-\text{R}^{10}$ .



where

$\text{L}^7, \text{L}^8, \text{L}^9, \text{L}^{10}, \text{L}^{11}, \text{L}^{12}$  comprise, independently, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heterocyclene, heteroarylene, fused cycloalkylarylene, fused cycloalkylheteroarylene, fused heterocyclarylene, fused heterocyclheteroarylene, or a direct bond; and

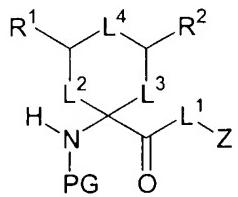
$\text{R}^{10}, \text{R}^{11}, \text{R}^{12}, \text{R}^{13}, \text{R}^{14}, \text{R}^{15}$  comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocycl, heteroaryl, aryl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclaryl, fused heterocyclheteroaryl,  $-\text{NR}^{18}\text{R}^{19}$ ,  $-\text{OR}^{18}$ ,  $-\text{SR}^{18}$ , or hydrogen, where  $\text{R}^{18}$  and  $\text{R}^{19}$  are as defined below;

$\text{R}^{18}$  and  $\text{R}^{19}$  comprise, independently, hydrogen, alkyl, alkynyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocycl, or heteroaryl.

2. (Original) The compound of claim 1, wherein the groups  $\text{L}^2, \text{L}^3, \text{L}^4, \text{E}$ , and  $\text{K}$  comprise a ring with 3 to 8 members.

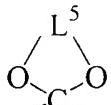
3. (Original) The compound of claim 2, wherein PG is selected from the group consisting of t-butoxycarbonyl, 9-fluorenylmethoxycarbonyl, and benzyloxycarbonyl.

4. (Original) The compound of claim 2, wherein  $\text{E}$  and  $\text{K}$  are  $-\text{CH}-$ , represented by the formula



and wherein,

L<sup>2</sup> and L<sup>3</sup> comprise, independently, -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, or a direct single bond;



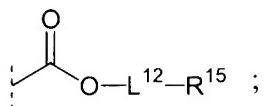
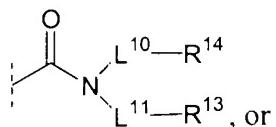
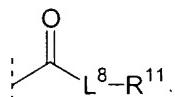
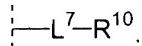
L<sup>4</sup> comprises -CH<sub>2</sub>-, -C(O)-, or a direct single bond;

L<sup>5</sup> comprises -CH<sub>2</sub>CH<sub>2</sub>- or -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-;

R<sup>1</sup> and R<sup>2</sup> comprises, independently, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, hydrogen, halo, -O-G<sup>3</sup>, -O-G<sup>4</sup>, -G<sup>3</sup>, -G<sup>4</sup>, or -N(G<sup>3</sup>)G<sup>4</sup>;

R<sup>1</sup> and R<sup>2</sup> may be taken together to constitute a cycloalkyl or heterocyclyl ring;

G<sup>3</sup> and G<sup>4</sup> comprise, independently,



where

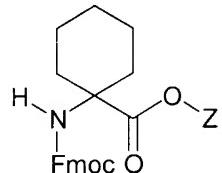
L<sup>7</sup>, L<sup>8</sup>, L<sup>10</sup>, L<sup>11</sup>, L<sup>12</sup> comprise, independently, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heterocyclylene, heteroarylene, fused cycloalkylarylene, fused cycloalkylheteroarylene, fused heterocyclarylene, fused heterocyclylheteroarylene, or a direct bond; and

R<sup>10</sup>, R<sup>11</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup> comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, heteroaryl, aryl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused

heterocyclaryl, fused heterocyclylheteroaryl, -NR<sup>18</sup>R<sup>19</sup>, -OR<sup>18</sup>, -SR<sup>18</sup>, or hydrogen, where R<sup>18</sup> and R<sup>19</sup> are as defined below;

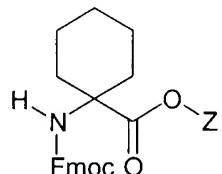
R<sup>18</sup> and R<sup>19</sup> comprise, independently, hydrogen, alkyl, alkynyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, or heteroaryl.

5. (Original) The compound of claim 4 of the formula



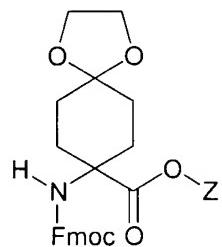
wherein Z comprises the Wang resin.

6. (Original) The compound of claim 4 of the formula



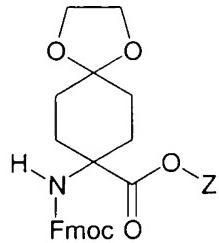
wherein Z comprises the Merrifield resin.

7. (Original) The compound of claim 4 of the formula



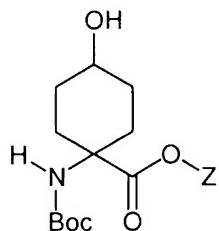
wherein Z comprises the Wang resin.

8. (Original) The compound of claim 4 of the formula



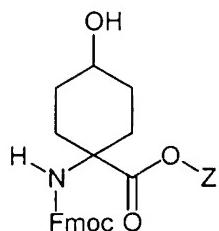
wherein Z comprises the Merrifield resin.

9. (Original) The compound of claim 4 of the formula



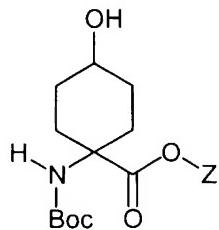
wherein Z comprises the Wang resin.

10. (Original) The compound of claim 4 of the formula



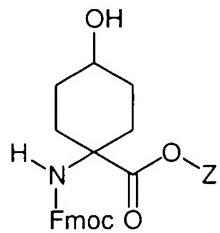
wherein Z comprises the Wang resin.

11. (Original) The compound of claim 4 of the formula



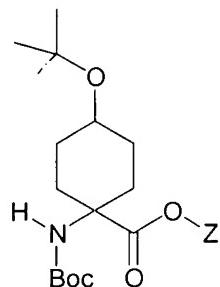
wherein Z comprises the Merrifield resin.

12. (Original) The compound of claim 4 of the formula



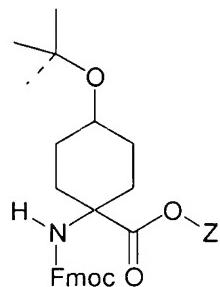
wherein Z comprises the Merrifield resin.

13. (Original) The compound of claim 4 of the formula



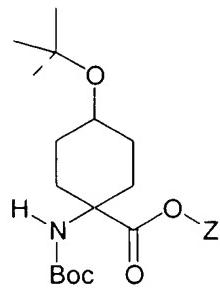
wherein Z comprises the Wang resin.

14. (Original) The compound of claim 4 of the formula



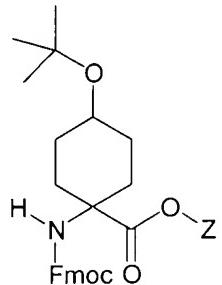
wherein Z comprises the Wang resin.

15. (Original) The compound of claim 4 of the formula



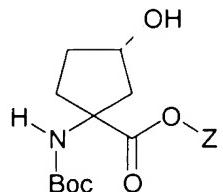
wherein Z comprises the Merrifield resin.

16. (Original) The compound of claim 4 of the formula



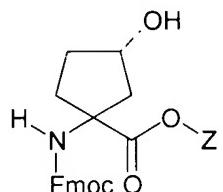
wherein Z comprises the Merrifield resin.

17. (Original) The compound of claim 4 of the formula



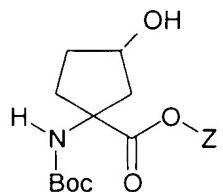
wherein Z comprises the Wang resin.

18. (Original) The compound of claim 4 of the formula



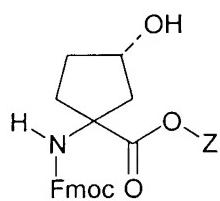
wherein Z comprises the Wang resin.

19. (Original) The compound of claim 4 of the formula



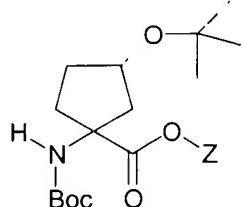
wherein Z comprises the Merrifield resin.

20. (Original) The compound of claim 4 of the formula



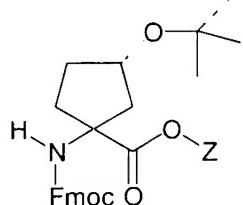
wherein Z comprises the Merrifield resin.

21. (Original) The compound of claim 4 of the formula



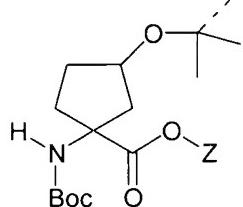
wherein Z comprises the Wang resin.

22. (Original) The compound of claim 4 of the formula



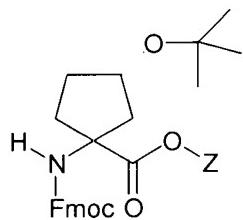
wherein Z comprises the Wang resin.

23. (Original) The compound of claim 4 of the formula



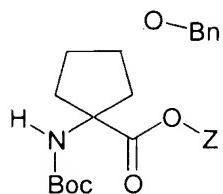
wherein Z comprises the Merrifield resin.

24. (Original) The compound of claim 4 of the formula



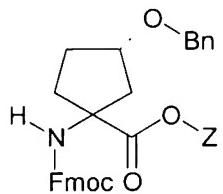
wherein Z comprises the Merrifield resin.

25. (Original) The compound of claim 4 of the formula



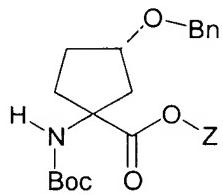
wherein Z comprises the Wang resin.

26. (Original) The compound of claim 4 of the formula



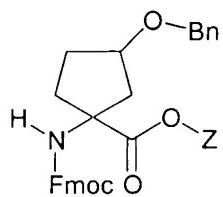
wherein Z comprises the Wang resin.

27. (Original) The compound of claim 4 of the formula



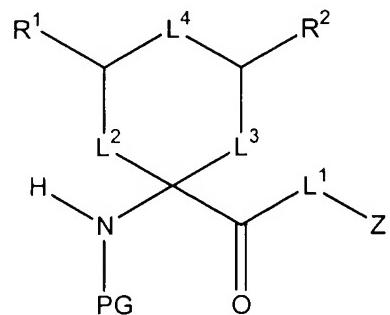
wherein Z comprises the Merrifield resin.

28. (Original) The compound of claim 4 of the formula



wherein Z comprises the Merrifield resin.

29. (Original) The compound of claim 2, wherein E and K are -CH-, represented by the formula



and wherein,

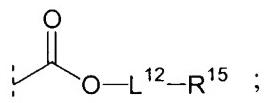
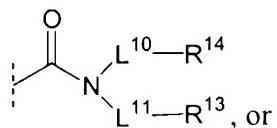
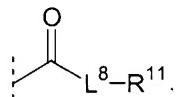
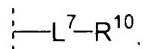
L<sup>2</sup> and L<sup>3</sup> comprise, independently, -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, or a direct single bond;

L<sup>4</sup> comprises -O-, -S-, -S(O)-, or -S(O)<sub>2</sub>-;

R<sup>1</sup> and R<sup>2</sup> comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, hydrogen, halo, -O-G<sup>3</sup>, -O-G<sup>4</sup>, -G<sup>3</sup>, -G<sup>4</sup>, or -N(G<sup>3</sup>)G<sup>4</sup>;

R<sup>1</sup> and R<sup>2</sup> may be taken together to constitute a heterocyclyl ring;

G<sup>3</sup> and G<sup>4</sup> comprise, independently,



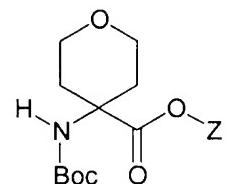
where

$L^7$ ,  $L^8$ ,  $L^{10}$ ,  $L^{11}$ ,  $L^{12}$  comprise, independently, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heterocyclene, heteroarylene, fused cycloalkylarylene, fused cycloalkylheteroarylene, fused heterocyclarylene, fused heterocyclheteroarylene, or a direct bond; and

$R^{10}$ ,  $R^{11}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$  comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocycl, heteroaryl, aryl, fused cycloalkylaryl, fused cycloakylheteroaryl, fused heterocyclaryl, fused heterocyclheteroaryl, - $NR^{18}R^{19}$ , - $OR^{18}$ , - $SR^{18}$ , or hydrogen, where  $R^{18}$  and  $R^{19}$  are as defined below;

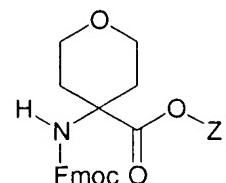
$R^{18}$  and  $R^{19}$  comprise, independently, hydrogen, alkyl, alkynyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocycl, or heteroaryl.

30. (Original) The compound of claim 29 of the formula



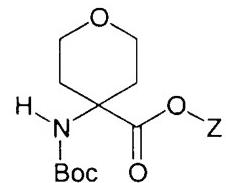
wherein Z comprises the Wang resin.

31. (Original) The compound of claim 29 of the formula



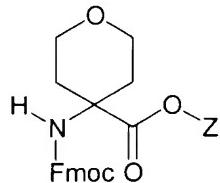
wherein Z comprises the Wang resin.

32. (Original) The compound of claim 29 of the formula



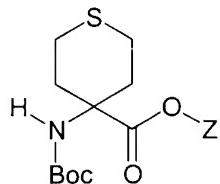
wherein Z comprises the Merrifield resin.

33. (Original) The compound of claim 29 of the formula



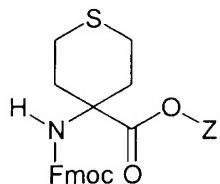
wherein Z comprises the Merrifield resin.

34. (Original) The compound of claim 29 of the formula



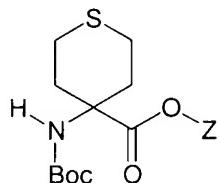
wherein Z comprises the Wang resin.

35. (Original) The compound of claim 29 of the formula



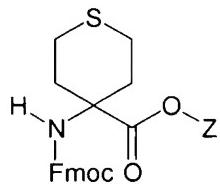
wherein Z comprises the Wang resin.

36. (Original) The compound of claim 29 of the formula



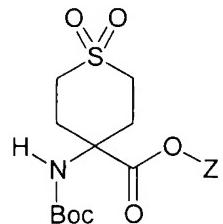
wherein Z comprises the Merrifield resin.

37. (Original) The compound of claim 29 of the formula



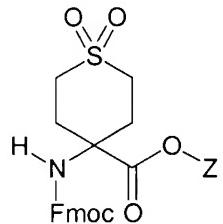
wherein Z comprises the Merrifield resin.

38. (Original) The compound of claim 29 of the formula



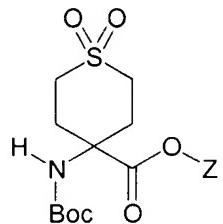
wherein Z comprises the Wang resin.

39. (Original) The compound of claim 29 of the formula



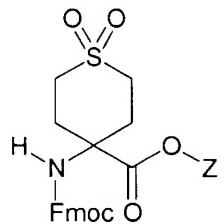
wherein Z comprises the Wang resin.

40. (Original) The compound of claim 29 of the formula



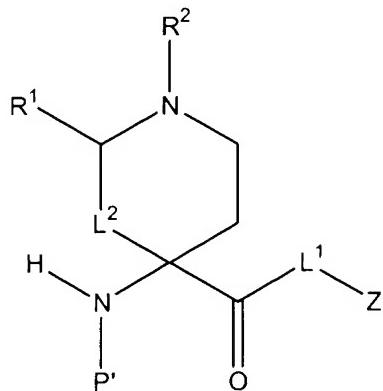
wherein Z comprises the Merrifield resin.

41. (Original) The compound of claim 29 of the formula



wherein Z comprises the Merrifield resin.

42. (Original) The compound of claim 2, wherein E comprises  $-CH-$ , K comprises  $-N-$ , L<sup>3</sup> comprises  $-CH_2CH_2-$ , L<sup>4</sup> comprises a direct single bond, represented by the formula



and wherein,

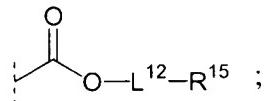
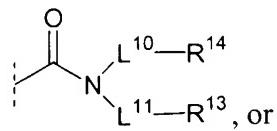
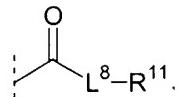
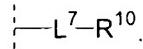
L<sup>2</sup> comprises  $-CH_2-$ ,  $-CH_2CH_2-$ , or a direct single bond;

R<sup>1</sup> comprises alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, hydrogen, halo, -O-G<sup>3</sup>, -G<sup>3</sup>, or  $-N(G^3)G^4$ ;

R<sup>2</sup> comprises alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, hydrogen, or  $-G^5$ ;

R<sup>1</sup> and R<sup>2</sup> may be taken together to constitute a heterocyclyl ring;

G<sup>3</sup> and G<sup>4</sup> comprise, independently,



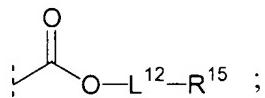
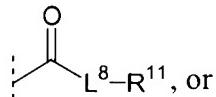
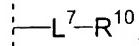
where

L<sup>7</sup>, L<sup>8</sup>, L<sup>10</sup>, L<sup>11</sup>, L<sup>12</sup> comprise, independently, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heterocyclene, heteroarylene, fused cycloalkylarylene, fused cycloalkylheteroarylene, fused heterocyclarylene, fused heterocyclheteroarylene, or a direct bond; and

$R^{10}$ ,  $R^{11}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$  comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, heteroaryl, aryl, fused cycloalkylaryl, fused cycloakylheteroaryl, fused heterocyclaryl, fused heterocyclylheteroaryl, - $NR^{18}R^{19}$ , - $OR^{18}$ , - $SR^{18}$ , or hydrogen, where  $R^{18}$  and  $R^{19}$  are as defined below;

$R^{18}$  and  $R^{19}$  comprise, independently, hydrogen, alkyl, alkynyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, or heteroaryl;

$G^5$  comprises



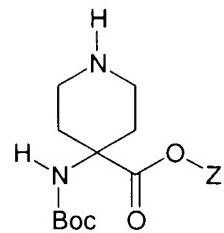
where

$L^7$ ,  $L^8$ ,  $L^{12}$  comprise, independently, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heterocyclylene, heteroarylene, fused cycloalkylarylene, fused cycloakylheteroarylene, fused heterocyclarylarylene, fused heterocyclylheteroarylene, or a direct bond; and

$R^{10}$ ,  $R^{11}$ ,  $R^{15}$  comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, heteroaryl, aryl, fused cycloalkylaryl, fused cycloakylheteroaryl, fused heterocyclaryl, fused heterocyclylheteroaryl, - $NR^{18}R^{19}$ , - $OR^{18}$ , - $SR^{18}$ , or hydrogen, where  $R^{18}$  and  $R^{19}$  are as defined below;

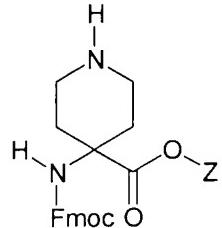
$R^{18}$  and  $R^{19}$  comprise, independently, hydrogen, alkyl, alkynyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, or heteroaryl.

43. (Original) The compound of claim 42 of the formula



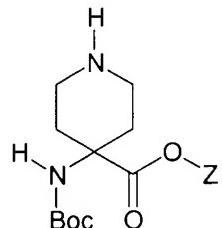
wherein Z comprises the Wang resin.

44. (Original) The compound of claim 42 of the formula



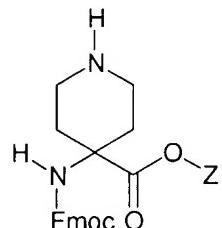
wherein Z comprises the Wang resin.

45. (Original) The compound of claim 42 of the formula



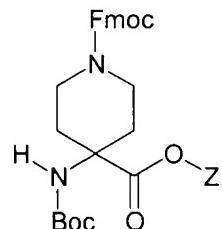
wherein Z comprises the Merrifield resin.

46. (Original) The compound of claim 42 of the formula



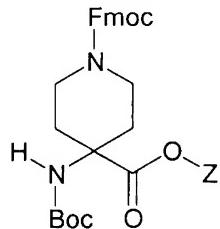
wherein Z comprises the Merrifield resin.

47. (Original) The compound of claim 42 of the formula



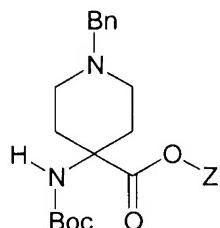
wherein Z comprises the Wang resin.

48. (Original) The compound of claim 42 of the formula



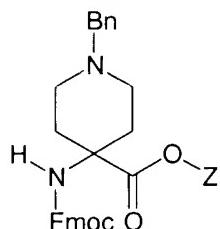
wherein Z comprises the Merrifield resin.

49. (Original) The compound of claim 42 of the formula



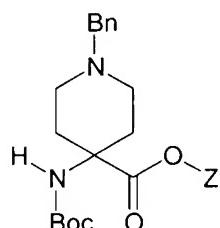
wherein Z comprises the Wang resin.

50. (Original) The compound of claim 42 of the formula



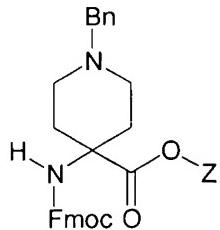
wherein Z comprises the Wang resin.

51. (Original) The compound of claim 42 of the formula



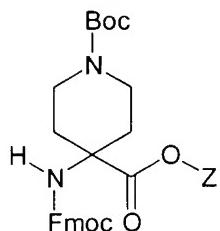
wherein Z comprises the Merrifield resin.

52. (Original) The compound of claim 42 of the formula



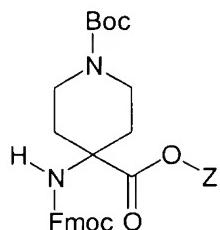
wherein Z comprises the Merrifield resin.

53. (Original) The compound of claim 42 of the formula



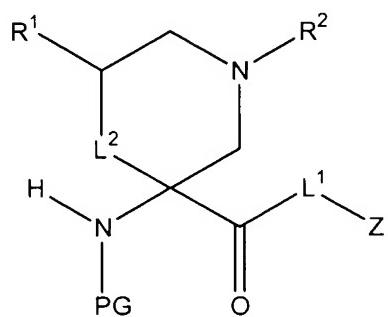
wherein Z comprises the Wang resin.

54. (Original) The compound of claim 42 of the formula



wherein Z comprises the Merrifield resin.

55. (Original) The compound of claim 2, wherein E comprises -CH-, K comprises -N-, L<sup>3</sup> comprises -CH<sub>2</sub>-, L<sup>4</sup> comprises -CH<sub>2</sub>-, represented by the formula



and wherein,

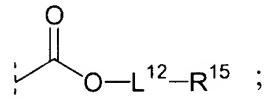
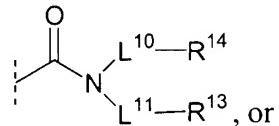
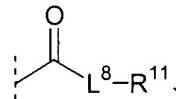
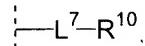
$L^2$  comprises  $-CH_2-$ ,  $-CH_2CH_2-$ , or a direct single bond;

$R^1$  comprises alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, hydrogen, halo,  $-O-G_3$ ,  $-G_3$ , or  $-N(G_3)G_4$ ;

$R^2$  comprises alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, hydrogen, or  $-G^5$ ;

$R^1$  and  $R^2$  may be taken together to constitute a heterocyclyl ring;

$G^3$  and  $G^4$  comprise, independently,



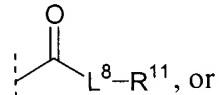
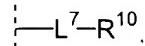
where

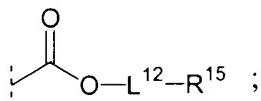
$L^7$ ,  $L^8$ ,  $L^{10}$ ,  $L^{11}$ ,  $L^{12}$  comprise, independently, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heterocyclylene, heteroarylene, fused cycloalkylarylene, fused cycloalkylheteroarylene, fused heterocyclarylene, fused heterocyclheteroarylene, or a direct bond; and

$R^{10}$ ,  $R^{11}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$  comprise, independently, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, heteroaryl, aryl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclaryl, fused heterocyclheteroaryl,  $-NR^{18}R^{19}$ ,  $-OR^{18}$ ,  $-SR^{18}$ , or hydrogen, where  $R^{18}$  and  $R^{19}$  are as defined below;

$R^{18}$  and  $R^{19}$  comprise, independently, hydrogen, alkyl, alkynyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, or heteroaryl.

$G^5$  comprises





where

L<sup>7</sup>, L<sup>8</sup>, L<sup>12</sup> are, independently, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heterocyclene, heteroarylene, fused cycloalkylarylene, fused cycloalkylheteroarylene, fused heterocyclarylene, fused heterocyclheteroarylene, or a direct bond; and

R<sup>10</sup>, R<sup>11</sup>, R<sup>15</sup> are, independently, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocycl, heteroaryl, aryl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclaryl, fused heterocyclheteroaryl, -NR<sup>18</sup>R<sup>19</sup>, -OR<sup>18</sup>, -SR<sup>18</sup>, or hydrogen, where R<sup>18</sup> and R<sup>19</sup> are as defined below;

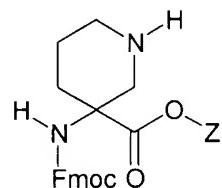
R<sup>18</sup> and R<sup>19</sup> are, independently, hydrogen, alkyl, alkynyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocycl, or heteroaryl.

56. (Original) The compound of claim 55 of the formula



wherein Z comprises the Wang resin.

57. (Original) The compound of claim 55 of the formula



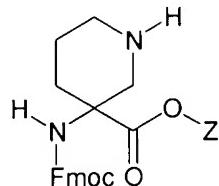
wherein Z comprises the Wang resin.

58. (Original) The compound of claim 55 of the formula



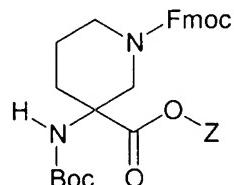
wherein Z comprises the Merrifield resin.

59. (Original) The compound of claim 55 of the formula



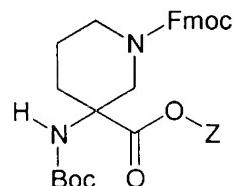
wherein Z comprises the Merrifield resin.

60. (Original) The compound of claim 55 of the formula



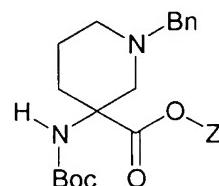
wherein Z comprises the Wang resin.

61. (Original) The compound of claim 55 of the formula



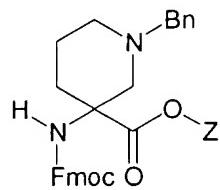
wherein Z comprises the Merrifield resin.

62. (Original) The compound of claim 55 of the formula



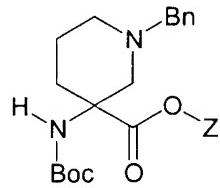
wherein Z comprises the Wang resin.

63. (Original) The compound of claim 55 of the formula



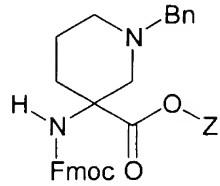
wherein Z comprises the Wang resin.

64. (Original) The compound of claim 55 of the formula



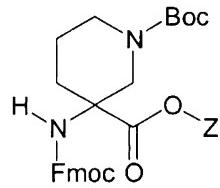
wherein Z comprises the Merrifield resin.

65. (Original) The compound of claim 55 of the formula



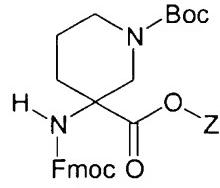
wherein Z comprises the Merrifield resin.

66. (Original) The compound of claim 55 of the formula



wherein Z comprises the Wang resin.

67. (Original) The compound of claim 55 of the formula



wherein Z comprises the Merrifield resin.